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REMARKS

Claims 1-10 are pending in the application. Favorable reconsideration of the application, as amended, is respectfully requested.

Applicants have amended Figs. 7 and 8 in the manner suggested by the Examiner. Withdrawal of the objection to the drawings is respectfully requested.

I. REJECTION OF CLAIMS 1-10 UNDER 35 USC §103(a)

Claims 1-10 stand rejected under 35 USC §103(a) based on *Applicants' Admitted Prior Art (AAPA) (Figs. 7 and 8)* in view of *Nishiwaki et al.* Applicants respectfully traverse this rejection for at least the following reasons.

i. Present Invention

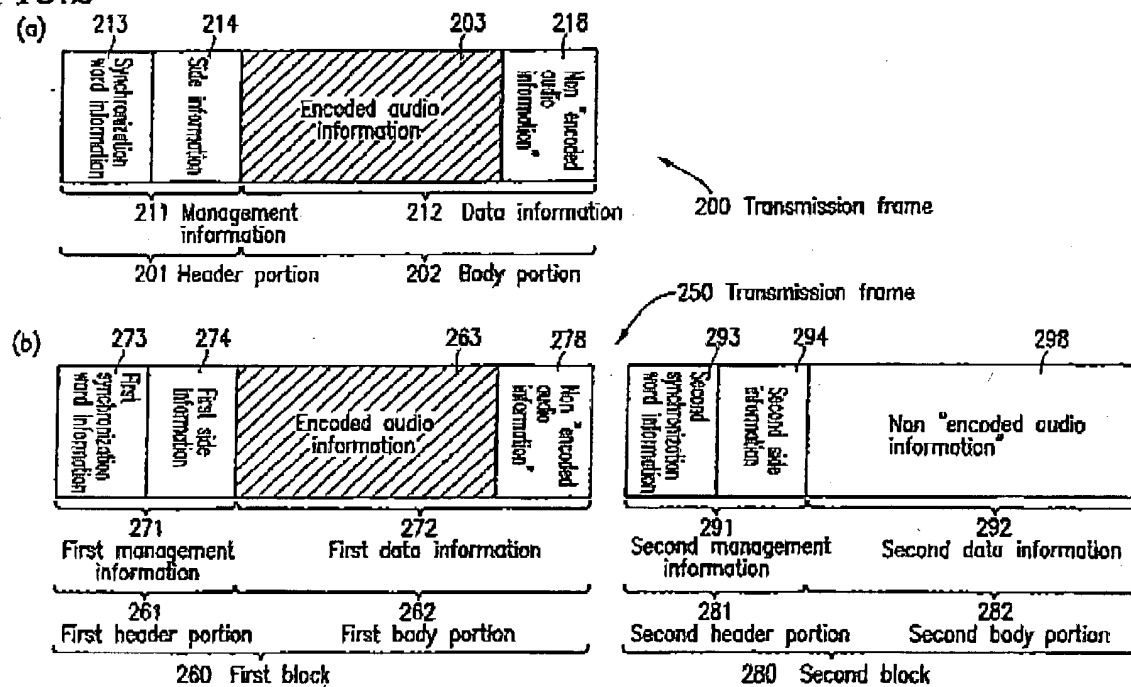
Claims 1, 5, 6 and 10 relate to a signal transmission apparatus or method for transmitting a plurality of pieces of encoded audio information encoded by the same encoding method via a digital interface to a signal reception apparatus. Each of the plurality of pieces of encoded audio information has a sampling frequency of F or $1/N \times F$, where N is an integer. In claims 1 and 6, N is equal to two. In claims 5 and 10, N is greater than or equal to two.

Referring specifically to claim 5, for example, when the encoded audio information has a sampling frequency of F , the data generating section generates one block for one-frame data of the encoded audio information. In addition, the data generating section stores one-frame data of the encoded audio information in the body portion of the generated block, and stores in the header portion of the generated block the management information including information indicating that data stored in the body portion of the generated block is valid. When the encoded audio information has a sampling frequency of $1/N \times F$, the data generating section generates a set of N blocks for one-frame data of the encoded audio information. The data generating section stores one-frame data of the encoded audio information in the body portion of a first block of the N generated blocks to be output first, stores in the header portion of the first block the management information including information indicating that data stored

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in the body portion of the first block is valid, and stores in the header portion of each block of the N generated blocks other than the first block the management information including information indicating that data stored in the body portion of the each block is invalid. The sizes of the N blocks generated by the data generating section when the encoded audio information has a sampling frequency of $1/N \times F$ are each equal to the size of the one block generated by the data generating section when the encoded audio information has a sampling frequency of F.

FIG. 2



Figs. 2(a) and 2(b) (Present Invention)

Figs. 2(a) and 2(b) of the present application (reproduced above) exemplify the invention as recited in claims 1, 5, 6 and 10. In the case where the encoded audio information has a sampling frequency of F, the data generating section generates the

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one block for one-frame data as illustrated in Fig. 2(a). In the case where the encoded audio has a sampling frequency of $1/N \times F$, the data generating section generates a set of N blocks for one-frame data as illustrated in Fig. 2(b) (where $N=2$). Each of the N blocks is equal in size to the one block generated when the sampling frequency was F. The first block 260 includes the one-frame data and information in the header 271 that the data is valid. The second block 280 includes invalid data and includes in the header 291 of each of the remaining of the N blocks information indicating that the data stored in the body is invalid.

ii. AAPA and Nishiwaki et al.

Regarding claims 1, 5, 6 and 10, the Examiner contends that AAPA discloses each of the features recited in the claims with the exception of when the encoded audio information has a sampling frequency which is an integer fraction of F. Specifically, the Examiner admits that AAPA does not teach that when the sampling frequency is $1/N \times F$ an integer number of blocks are created, one of which includes the valid data and the others which are the same size but do not include valid data.

However, the Examiner contends that *Nishiwaki et al.* teaches providing stuffing information. The Examiner contends that it would be obvious that the frame size of an original sampling frequency would be retained and that the difference between audio data amounts would be compensated by a stuffing data amount. (See, e.g., OA, Page 4).

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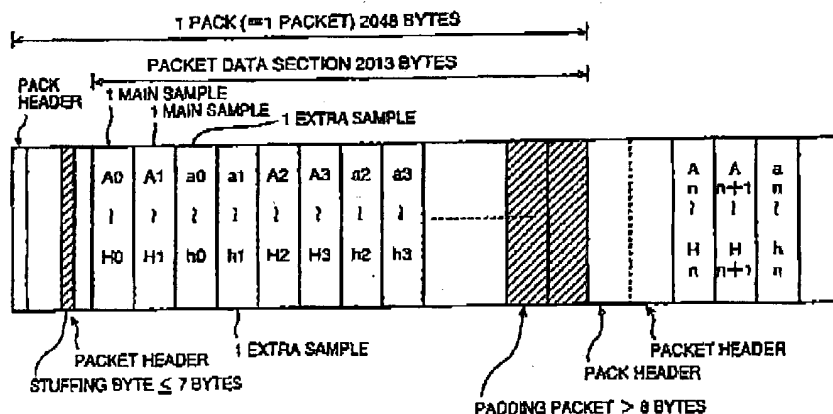


Fig. 3 of Nishiwaki et al.

The Examiner cites column 14, lines 31-49 and Fig. 3 (reproduced above) of *Nishiwaki et al.* in support of the rejection. Applicants agree that *Nishiwaki et al.* teaches the aspect of providing stuffing data in a packet. However, applicants respectfully submit that this is simply similar to what is done in the *Applicants' Admitted Prior Art (AAPA)* as discussed, for example, at Page 6, lines 15-16 of the specification.

Nishiwaki et al. does not teach or suggest anything beyond such typical padding. Specifically, *Nishiwaki et al.* does not teach or suggest generating one block in the case of a sampling frequency of F , and generating N number of blocks of the same size, one of which contains the encoded audio data and the others which contain invalid data in the case of a sampling frequency of $1/N \times F$ as recited in Claims 1, 5, 6 and 10.

Nishiwaki et al. simply teaches that if the total byte length of the sample data is less than or equal to a maximum packet byte length, stuffing byte data or padding byte data is inserted to fill in a remaining portion. (See Abstract; and Fig. 5, Steps S16, S17 and S18). In other words, neither *AAPA* nor *Nishiwaki et al.* teach or suggest generating either one block or N blocks depending on whether the sampling frequency is F or $1/N \times F$. Thus, the Examiner has not provided even a *prima facie* basis for the rejection of claims 1, 5, 6 and 10. Absent even a *prima facie* showing, the rejection is improper and must be withdrawn.

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Furthermore, applicants respectfully disagree with the Examiner that it would be obvious to simply create additional blocks as claimed in order to compensate for the different sampling frequency. First of all, applicants note that the Examiner indicates it would be obvious to provide the stuffing information in order to compensate between different audio data amounts. This may be true, but only in the context of filling up an unused portion within a given packet as taught in Fig. 5 of *Nishiwaki et al.* There is no teaching or suggestion in *Nishiwaki et al.* as to why one might create additional blocks of equal length but filled merely with invalid data. *Nishiwaki et al.* does not teach or suggest there being any advantage associated with effectively creating an integer number of dummy blocks of equal length and transmitting such dummy blocks. Thus, there simply is no motivation for the modification proposed by the Examiner.

An advantage of the present invention is that the transmitter need not communicate the change in the sampling frequency of the transmitted data. The data in the additional N-1 blocks may be ignored by the receiver based on the information in the header indicating that the data stored in the body portion is invalid. In stark contrast, in *Nishiwaki et al.* the receiver must recognize the sampling frequency, thereby necessitating that the transmitter provide information regarding a change in sampling frequency. (See, e.g., column 14, lines 31-36 of *Nishiwaki et al.* reciting that the sampling frequency must be provided in the header).

Accordingly, *AAPA* and *Nishiwaki et al.* fail to teach or suggest each and every feature of the invention as recited in claims 1, 5, 6 and 10. Moreover, no motivation has been shown which would prompt one having ordinary skill in the art to make the modifications to *AAPA* and *Nishiwaki et al.* as proposed by the Examiner. For at least each of these reasons, the rejection should be withdrawn. Furthermore, remaining claims 2-4 and 7-9 can be distinguished over the references for at least the same reasons as the claim from which they depend. Withdrawal of the rejection of claims 1-10 is respectfully requested.

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II. CONCLUSION


Accordingly, all claims 1-10 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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DATE: September 1, 2004

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